REMARKS

4. Drawing Obj ctions.

The drawings are objected to under 37 CFR 1.83(a). The Office Action states that the "drawings must show every feature of the invention in the claims. Therefore, base[d] on the elected species, a planar region [claim 1, page 42, line 19], at least one interconnection region [claim 1, page 42, line 20] and an assembled component [claim 24] must be shown or the features canceled from the claim(s). No new matter should be entered."

4a. In regard to a "planar region", Applicant has amended Figure 27 and Figure 30, to refer to the first planar region 158 and the second planar region 159. As well, Applicant has amended Figure 24, Figure 25, and Figure 26, to indicate the pad matrix 88 and the first planar region 158.

Support is seen in the Application as filed, at least on page 13, lines 16-20; on page 30, lines 8-17, in Figures 15-17, 22-23, 24-29, and 34; and in Claim 1, Claim 33, and Claim 62.

4b. In regard to "at least one interconnection region", Applicant has amended independent Claim 1, to particularly point out and distinctly claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link".

Applicant has also amended Figure 16, Figure 17, Figure 27, and Figure 30, to indicate the first end 115 and the second end 117 of modules 92.

Support is seen in the Application as filed, at least page 13, lines 16-20; on page 30, lines 8-17; in Figures 15-17, 24-30, and 34; and in Claim 1, Claim 33, and Claim 62.

Applicant therefore respectfully submits that the drawings show every feature of the invention in independent Claim 1, as amended.

4c. In regard to "an assembled component", Applicant has amended Figure 13, to include reference character "16a" in reference to a preferred embodiment of a substrate 16, as shown in the replacement formal drawing. Applicant has also amended the specification, on page 17, line 36 to page 18, line 9, to refer to the preferred substrate 16a. Applicant has also amended Figure 13, to include an assembled component element, reference character "69", and associated lead line, as shown in the replacement formal drawing. Applicant has also amended Claim 24, to claim "the system of Claim 1, further comprising: an assembled component located on any of said probe surface and connector surface of said substrate."

Support is seen in the Application as filed, at least in Figure 13 (*e.g.* such as elements 59,69); in Claims 24-27; and on page 17, line 36 to page 18, line 24, wherein:

> "Figure 13 shows a partial cross-sectional view 56 of an ultra high frequency spring probe substrate 16. For embodiments wherein a spring probe 61 and related electrical conductors 60, 68, 64 on and through the substrate 16 are required to be impedance matched, one or more conductive reference surfaces 58a,58b,58c,58d and vias 65a,65b,65c may preferably be added, either within or on the substrate 16. The substrate 16 may also contain alternating ground reference traces 62a,62b, which are connected to reference planes 58a,58b,58c, to effectively provide a shielded coaxial transmission line environment 63. As well, the impedance control surfaces 58a,58b,58c,58d are not limited to the planar surfaces shown in Figure 13.
>
> An insulating layer 66 may be deposited on a portion the probe spring 61, such as on the fixed region of the probe spring 61, up to but not enclosing the tip 24 (FIG. 2), as well as on the trace 60, which connects the spring probe 61 to the via 68. A conductive layer 58d may be deposited on top of the insulating layer 66, to provide a coaxial, controlled low impedance connection. Alternate layers of conductive materials 58 and dielectric materials 66 can preferably be integrated within the substrate 16, such as for embodiments which require decoupling capacitors in close proximity to a probe spring 61. For a substrate 16 which is a conductive material, such as silicon, a thin oxide layer 57 may preferably be deposited between the substrate 16 and a conductive reference plane 58c, thereby forming a high capacitance structure 59 between the spring probe 61 and the ground planes 58a and 58b. **As well, one or more assembled components 69, such as passive components 69 (*e.g.* typically capacitors, resistors, and/or inductors), or**

active compon nt devices 69, may be inc rp rat d on eith r surfac 62a,62 of th substrate."

Applicant therefore respectfully submits that Figure 13 shows every feature of the invention as claimed in dependent Claim 24, as amended.

Applicant therefore respectfully submits that the Figures, as amended, overcome the objections under 37 CFR 1.83(a).

5-6. 35 U.S.C. § 112. Rejections.

6. The Office Action states that "Claims 1-4, 7-10, 12, 19-24, 32-41, 48-52 and 61 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention."

6a. Regarding claims 1 and 33, the Office Action states that "the specification does not particularly point the limitations "a planar region" and "at least one interconnection region" as claimed. It is not define[d] in the specification if a flex circuit region 90 represents one or both of the regions in the claim. Since the specification does not point the limitations above, the claim is indefinite.

Applicant has amended independent Claim 1, to particularly point out and distinctly claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link".

Applicant has also amended independent Claim 33, to claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite the first end, each of said at least one interface module a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate.

Support for claimed "planar region" is seen in the Application as filed, at least on page 13, lines 16-20; on page 30, lines 8-17, in Figures 15-17, 22-23, 24-29, and 34; and in Claim 1, Claim 33, and Claim 62.

Details of the planar region are seen in the Application as filed, at least on page 13, lines 16-20, wherein:

> "Figure 27 is a perspective view of an alternate embodiment of a test electronics module, in which an integrated module base provides a pad matrix on a first planar region, and in which a power module is electrically connected to the pad matrix and to one or more buss bars, and is positioned in thermal contact with a buss bar"

Further details regarding planar regions of the modules 92 are seen in the Application as filed, at least on page 30, lines 8-17, wherein:

> "Figure 27 is a perspective view of one alternate embodiment of a test electronics module 92, in which **an integrated module base 157 provides a pad matrix 88 of electrical contacts 119 on a pad matrix planar region 158**. One or more power control modules 100 are electrically connected to electrical contacts 119 located the pad matrix, through power control module (PCM) traces 149, and to one or more buss bars 98a-98h. The power control modules 100 are also preferably positioned in thermal contact with one or more buss bars 98a-98h. Signal traces 148 are also connected to electrical contacts 119 located the pad matrix 88. **The signal trac s 148 xt nd across a link and comp nent planar region 159, and ar ith r conn ct d t t st l ctronics 94, or xt nd to link 96**."

Applicant therefore respectfully submits that independent Claim 1 and independent Claim 33, as amended, overcome the rejections under 35 U.S.C. § 112, and are fully supported by the Application as filed. As dependent claims 2-4, 7-10, 12, 19-24 and 32 depend from amended Claim 1, and as dependent claims 34-41, 48-52 and 61 depend from amended Claim 33, and inherently contain all the limitations of the claims they depend from, they are seen to overcome the rejections under 35 U.S.C. § 112 as well.

6b. Regarding claims 9-10 and 39-40, the Office Action states that "the specification does not particularly point out that the circuit is semi-rigid or rigid circuit as claimed. Since the specification does not point the limitations above, the claim is indefinite."

Applicant has amended dependent Claim 9 and dependent Claim 39, to claim that each of the interface modules comprises a circuit structure comprising a dielectric layer and opposing conductive layers on opposing sides of said dielectric layer, wherein said circuit structure is substantially rigid in regions of said dielectric layer where at least one of the conductive layers are located, and wherein said circuit structure is controllably flexible in regions of said dielectric layer where at least one of the conductive layers is controllably removed.

Support is seen in the Application as filed, at least on page 28, lines 10-20, and in Figures 15-16, 20-21, 24-26, and 28-30.

Applicant has amended dependent Claim 10 and dependent Claim 40, to claim that each of the interface modules comprises an integrated module base extending from said first planar region to said interconnection link.

Support is seen in the Application as filed, at least on page 30, lines 5-17, and in Figure 27.

Applicant therefore respectfully submits that Claims 9-10 and 39-40, as amended, overcome the rejections under 35 U.S.C. § 112, and are fully supported by the Application as filed.

6c. Regarding claims 20-21 and 49-50, the Office Action states that "the specification does not particularly point out that the substrate is semi-rigid or rigid as claimed. Since the specification does not point the limitations above, the claim is indefinite".

Applicant notes that Claim 20 and Claim 49 claim that the substrate is "electrically insulative", and Claim 21 and Claim 50 claim that the substrate is dielectric.

Applicant has also amended the Specification, to specify that the substrate may be electrically insulative, dielectric, or electrically conductive.

Support for a substrate which is electrically insulative is seen in the Application as filed, at least in Claim 20 and Claim 49. Support for the use of dielectric material within a substrate is seen in the Application as filed, at least on page 18, lines 10-17; in Claim 21 and Claim 50.

Applicant therefore respectfully submits that Claims 20-21 and 49-50, as amended, overcome the rejections under 35 U.S.C. § 112, and are fully supported by the Application as filed.

7-8. Rejections under 35 USC §102.

8. Claims 1, 3, 7, 19-20, 23-24, 33, 35, 37, 48-49, and 52-53 are rejected under U.S.C. 102(b) as being anticipated by Higgins et al. (U.S. 5,828,226).

Applicant has amended Claim 1, to claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

Support is seen in the Application as filed, at least on page 19, line 35 to page 20, line 19; on page 24, line 18 to page 27, line 2; on page 29, line 14 to page 30, line 17; on page 39, lines 8-32; and in Figures 15-17, 24-29, and 34.

Higgins et al describes a probe card assembly for high density integrated circuits, as seen at least in the Abstract, wherein:

"A probe card assembly includes a probe card, an interposer and a probe array. The probe array includes a plurality of closely spaced pins, each pin includes a post and a beam, and each beam has a first end attached to the top of a post and a second end for contacting an integrated circuit. A bead on the second end of the beam assures that the free end of the beam will contact an IC first. For contacts on a grid, the beams extend diagonally relative to the rows and columns of the grid, enabling the beams to be longer. For contacts in a row on centers closer than the pins, two rows of pins straddle the contacts and the beams extend toward the contacts from opposite sides of the contacts. The probe array can be formed on the high density side of the interposer."

Higgins also describes a compliant interconnect, as seen in Figure 1, Figure 15, and in col. 4, lines 17-23; in col. 5, lines 42-51; and in col. 7, lines 21-27.

While Higgins describes a compliant interconnect, Applicant respectfully submits that Higgins et al. does not disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

Applicant has also amended independent Claim 33, to claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of

electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate.

Support is seen in the Application as filed, at least on page 19, line 35 to page 20, line 19; on page 24, line 18 to page 27, line 2; on page 29, line 14 to page 30, line 17; on page 39, lines 8-32; and in Figures 16, 17, 24-27, and 30-31.

While Higgins describes a compliant interconnect, Applicant respectfully submits that Higgins et al. does not disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module a comprising plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate."

Applicant therefore respectfully submits that independent Claims 1 and 33 overcome the rejections under U.S.C. 102(b) as being anticipated by Higgins et al. (U.S. 5,828,226). As Claims 1, 3, 7, 19-20, 23-24 depend from independent Claim 1, and as claims 35, 37, 48-49, and 52-53 depend from independent Claim 33, and inherently include all the limitations of the claims they depend from, they are seen to be patentable as well.

9-12. Claim R j ctions und r 35 USC § 103.

11. Claims 2, 4, 34 and 36 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins et al in view of Smith et al (U.S. Patent No. 5,613, 861).

Regarding claims 2, 4, 34, and 36, the Office Action states that "Higgins et al disclose a substrate (probe array 11) having a probe surface (bottom surface of the array) and a connector surface (top surface of the array), said probe surface having a plurality of spring probe contact tips (combination of post 25, beam 27 and bump 29 in Fig. 2) for connection to said at least one integrated circuit device [see col. 4, line 10-14]."

However, the Office Action admits that "they do not disclose said plurality of spring probe contact tips are photolithographically patterned springs".

Applicant submits that Smith et al. (U.S. Pat. No. 5,914,218) describes a photolithographically patterned spring contact, as seen at least in the Abstract, wherein:

> "A photolithographically patterned spring contact is formed on a substrate and electrically connects contact pads on two devices. The spring contact also compensates for thermal and mechanical variations and other environmental factors. An inherent stress gradient in the spring contact causes a free portion of the spring contact to bend up and away from the substrate. An anchor portion remains fixed to the substrate and is electrically connected to a first contact pad on the substrate. The spring contact is made of an elastic material and the free portion compliantly contacts a second contact pad, thereby electrically interconnecting the two contact pads."

Applicant has amended Claim 1, to claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

Support is seen in the Application as filed, at least on page 19, line 35 to page 20, line 19; on page 24, line 18 to page 27, line 2; on page 29, line 14 to page 30, line 17; on page 39, lines 8-32; and in Figures 15-17, 24-29, and 34.

In regard to Claim 1, as amended, Applicant respectfully submits that neither Higgins et al nor Smith et al disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

Applicant has also amended independent Claim 33, to claim "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate."

Support is seen in the Application as filed, at least on page 19, line 35 to page 20, line 19; on page 24, line 18 to page 27, line 2; on page 29, line 14 to page 30, line 17; on page 39, lines 8-32; and in Figures 16, 17, 24-27, and 30-31.

In regard to Claim 33, as amended, Applicant respectfully submits that neither Higgins et al nor Smith et al disclose does not disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate."

As well, there is no suggestion, express or implied, that Higgins et al or Smith et al, alone or combined, be modified to meet Claim 1 or Claim 33, as amended.

Therefore, Applicant respectfully submits that Claims 1 and 33 overcome the rejections under 35 U.S.C. §103(a) as being unpatentable over Higgins et al in view of Smith et al. As Claims 2 and 4 depend from independent Claim 1, and as claims 34 and 36 depend from independent Claim 33, and inherently include all the limitations of the claims they depend from, they are seen to be patentable as well.

12. Claims 8-10, 21-22, 38-40 and 50-51 are rejected under 35 U.S.C. §103(a) as being unpatentable over Higgins et al.

In regard to Claim 1, as amended, Applicant respectfully submits that Higgins et al does not disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link; and means for holding each of said at least one interface

module in relation to said system board, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

In regard to Claim 33, as amended, Applicant respectfully submits Higgins et al does not disclose "at least one interface module comprising a first planar region at a first end and a second planar region which extends from said first end to a second end opposite said first end, each of said at least one interface module comprising a plurality of electrically conductive pads on said first planar region, an interconnection link at said second end, and at least one electrical connection extending from at least one of said electrically conductive pads to said interconnection link;

a plurality of electrically conductive connections between each of said plurality of electrical connections on said connector surface of said substrate and said plurality of electrically conductive pads located on said planar region of said at least one interface module; and

means for holding each of said at least one interface module in relation to said substrate, such that said plurality of electrically conductive pads on said first planar region contact at least one of said plurality of electrical connections on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate."

As well, there is no suggestion, express or implied, that Higgins et al be modified to meet Claim 1 or Claim 33, as amended. It would therefore require undue experimentation to meet Claim 1 and Claim 33, as amended.

Therefore, Applicant respectfully submits that Claims 1 and 33 overcome the rejections under 35 U.S.C. §103(a) as being unpatentable over Higgins et al. As Claims 8-10 and 21-22 depend from independent Claim 1, and as claims 38-40 and 50-51 depend from independent Claim 33, and inherently include all the limitations of the claims they depend from, they are seen to be patentable as well.

13. Applicant has amended the Specification, to provide a claim for priority to related applications.

Applicant has amended dependent Claim 12 and Claim 41, wherein each of said interface modules further comprises at least one buss bar electrically connected to said interface module.

Support is seen in the Application as filed, at least on page 24, lines 26-34; on page 29, line 14 to page 30, line 28 and in Figures 15-17 and 24-27.

14. Applicant has added new independent Claim 79, to particularly point out and distinctly claim the invention, wherein the system comprises "at least one interface module comprising a first planar region at a first end on which is disposed a matrix of electrically conductive pads and a second planar region extending from said first end to a second end opposite the first end, an interconnection link at said second end, and at least one electrical connection between said electrically conductive pads and said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said electrically conductive pads on said first planar region are brought into electrical connection with said electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

Applicant has also added new independent Claim 95, to particularly point out and distinctly claim the invention, wherein the system comprises "at least one interface module comprising a first planar region at a first end on which is disposed a matrix of electrically conductive pads and a second planar region extending from said first end to a second end opposite the first end, an interconnection link at said second end, and at least one electrical connection between said electrically conductive pads and said interconnection link; and means for holding each of said at least one interface module in relation to said substrate, such that said electrically conductive pads on said first planar region are brought into electrical connection with said electrical contacts on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate".

Applicant has also added new dependent Claims 80-94 and 96-108, to particularly point out and distinctly claim the invention.

Support for new Claims 79-109 seen in the Application as filed, at least on page 13, lines 16-20; on page 18, lines 10-17; on page 19, line 35 to page 20, line 19; on page 24, line

18 to page 27, line 2; on page 28, lines 10-20; on page 29, line 14 to page 30, line 17; on page 39, lines 8-32; and in Figures 15-17, 24-31, and 34; and in the Claims, as filed.

In regard to new Claim 79, Applicant respectfully submits that neither Higgins et al nor Smith et al disclose "at least one interface module comprising a first planar region at a first end on which is disposed a matrix of electrically conductive pads and a second planar region extending from said first end to a second end opposite the first end, an interconnection link at said second end, and at least one electrical connection between said electrically conductive pads and said interconnection link; and means for holding each of said at least one interface module in relation to said system board, such that said electrically conductive pads on said first planar region are brought into electrical connection with said electrical conductors on said top surface of said system board, and wherein said second planar region of said interface module extends away from said system board."

In regard to new Claim 95, Applicant respectfully submits that neither Higgins et al nor Smith et al disclose " "at least one interface module comprising a first planar region at a first end on which is disposed a matrix of electrically conductive pads and a second planar region extending from said first end to a second end opposite the first end, an interconnection link at said second end, and at least one electrical connection between said electrically conductive pads and said interconnection link; and means for holding each of said at least one interface module in relation to said substrate, such that said electrically conductive pads on said first planar region are brought into electrical connection with said electrical contacts on said connector surface of said substrate, and wherein said second planar region of said interface module extends away from said substrate".

Applicant submits that it would take significant modification and undue experimentation, to meet new Claims 79 and 95, as entered. As well, there is no suggestion, express or implied, that Higgins et al or Smith et al, alone or combined, be modified to meet new Claims 79 and 95, as entered.

Therefore, Applicant submits that Claim 79 and 95, as entered, are patentable over Higgins et al. and Smith et al. As dependent claims 80-94 depend from independent Claim 79, and dependent claims 96-108 depend from independent Claim 95, and inherently contain all the limitations of claims they depend from, they are seen to be patentable as well.

CONCLUSION

Applicant respectfully submits that Claims, Specification, and Drawings, as amended, overcome the objections and rejections set forth in the Office Action. Applicant also respectfully submits that the new Claims, as entered, overcome the rejections set forth in the Office Action. Applicant also submits that the amendments do not introduce new matter into the Application. Based on the foregoing, Applicant considers the invention to be in condition for allowance. Applicant earnestly solicits the Examiner's withdrawal of the rejections set forth in the prior Office Action, such that a Notice of Allowance is forwarded to Applicant, and the present application is therefore allowed to issue as a United States patent.

Respectfully Submitted,

Michael A. Glenn
Reg. No. 30,176

Customer No. 22862